

AMENDMENTS TO THE SPECIFICATION

Paragraph [1] has been amended as follows:

--This application claims priority under 35 U.S.C. § 120 as a Continuation of U.S. patent application no. 09/970,383 filed October 2, 2003, which priority under 35 U.S.C. § 119(e) from provisional U.S. patent application no. 60/238,387 filed October 6, 2000.--

Paragraph [44] has been amended as follows:

--According to one leak estimation technique, Q_{leak} in equation (2) at any given moments is determined as:

$$Q_{\text{leak}} = LF \sqrt{P_{\text{patient}}} , \quad (3)$$

where LF is a leak factor that is preferably calculated for each breath as:

$$LF = \frac{\int_0^{T_{\text{breath}}} (Q_{\text{primary}} + Q_{\text{Secondary}} - Q_{\text{exhaust}}) dt}{\int_0^{T_{\text{breath}}} (\sqrt{P_{\text{patient}}}) dt} . \quad (4)--$$